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1 RECORD OF ORAL HEARING

2 UNITED STATES PATENT AND TRADEMARK OFFICE

3  
4 BEFORE THE BOARD OF PATENT APPEALS  
5 AND INTERFERENCES

6  
7 *Ex parte* EDWARD C. CARMAN, JR.  
8 and EDWARD C. CARMAN, III.

9  
10 Appeal 2009-002407  
11 Application 10/081,273  
12 Technology Center 3600

13 Oral Hearing Held: July 7, 2009

14  
15 Before TONI R. SCHEINER, DONALD E. ADAMS, and STEPHEN G.  
16 WALSH, *Administrative Patent Judges*.

17 APPEARANCES:

18 ON BEHALF OF THE APPELLANTS:

19 ARTHUR Z. BOOKSTEIN, ESQUIRE  
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24 ALSO PRESENT:

25 EDWARD C. CARMAN, JR., APPLICANT

1 The above-entitled matter came on for hearing on Tuesday,  
2 April 21, 2009, commencing at 9:02 a.m., at the U.S. Patent and Trademark  
3 Office, 600 Dulany Street, Alexandria, Virginia, before Dawn A. Brown,  
4 Notary Public.

5  
6 P R O C E E D I N G S

7 THE USHER: Good morning. Calendar number 7, Mr. Bookstein.  
8 JUDGE SCHEINER: Good morning. Would you like to – you can  
9 get started whenever you're ready, but would you like to introduce your  
10 colleague for the record?

11 MR. BOOKSTEIN: Yes. My name is Arthur Bookstein. I'm with  
12 K&L Gates, and I'm counsel for the Appellants. I have with me Mr. Edward  
13 C. Carman, Jr., one of the Applicants and Appellants, and I would ask  
14 permission of the Court if he might demonstrate briefly his invention.

15 JUDGE SCHEINER: Oh, sure. Certainly.

16 MR. BOOKSTEIN: Okay. Thank you.

17 JUDGE SCHEINER: And I just wanted to double check that this is a  
18 public -- we have this down as a public hearing because we do have an  
19 observer.

20 MR. BOOKSTEIN: I believe it is because the application has been  
21 published.

22 JUDGE SCHEINER: Just double checking.

23 MR. BOOKSTEIN: Mr. Carman, if you'd like to demonstrate your  
24 invention, take maybe five minutes, not any more than that.

25 MR. CARMAN: I'd be happy to do that.

1 JUDGE SCHEINER: Would you like to come around here? I have  
2 trouble seeing over the bench.

3 MR. CARMAN: For 20 years, I walked to work and watched people  
4 sweep like this, and it always impressed me how much pressure it put on the  
5 wrist. And I knew that people suffered carpal tunnel from that.

6 So the question was how to make a product that would solve that  
7 problem. And the solution requires four things:

8 One is to transfer the forces from here to the forearm -- to the  
9 forearm.

10 Secondly, to have those forces apply on all sides of the forearm.

11 Thirdly, to have one size fit all.

12 And fourthly, to use a minimum amount of material. The solution was  
13 this handle, which, as you can see, has four parts: An attachment end for a  
14 tool, a grip that can be used right-handed or left-handed, a seat over which  
15 the wrist sits, and a helix, which goes around the arm.

16 Because of the geometry, you can push down, and it lifts the seat up.  
17 You can push this way and it engages here. You can pull this way and it  
18 engages here. And if you push down on it, it engages here. 360 degrees  
19 around the arm.

20 The second thing is --

21 JUDGE SCHEINER: I'm sorry. Could you hold it up just a second.  
22 There was a drawing in -- one of your drawings that I had a little bit of  
23 trouble understanding. Thank you. Got it. Thanks.

24 Did you want to look at it?

25 JUDGE ADAMS: No, I'm good.

1 MR. CARMAN: So one of the interesting things about the helix,  
2 which is the key to this, is that it gets a little larger as it goes back and,  
3 therefore, accommodates the arm.

4 You'll see that my arm, which is slender, there is lots of room left in  
5 here. And secondly, therefore, this helix can accommodate an arm that is  
6 twice as big as mine just as it stands.

7 Second point about it that was not obvious at the beginning is that if I  
8 flex my wrist to the left, it pulls this side in, so now what was loose becomes  
9 tight and I have great control.

10 Similarly, if I flex my wrist this way, it pulls the top down, so now I  
11 have something where I have complete control over 360 degrees.

12 And it allows multiple uses. For instance, with a broom, I can do this.  
13 When I push this way, it engages here, and when I go this way, it engages  
14 here. If I lift up, it engages on the bottom. If I pull down, it would engage  
15 on the top.

16 If I put a paint roller on it, it actually allows a remarkable extension to  
17 here. And you'll notice that the pressure is there and there. My hand isn't  
18 even gripping. As I come down like this, now the pressure is on the bottom  
19 and the top is released, and I can use one hand. I have great control.

20 If I put this device on it, I can stand on the floor and cut in this. And  
21 if I go the other -- when I push this way, I push my wrist down, and it pulls  
22 the helix in. I have great control. When I go this way, it comes on the other  
23 side.

24 In New England, we have a lot of use for this, which is scraping the  
25 ice off a windshield, and it works very well. You can put a tremendous

1 amount of force on it very easily. Also, you can have the brush and get the  
2 other side of the car.

3 So the point is this really does meet the four requirements: The wrist  
4 is in an appropriate position, one size fits all, the most important thing is that  
5 you can flex the wrist like this, which tightens it up or loosens it which gives  
6 a lot of flexibility, and it allows work in all 360 degrees.

7 The Stephens –

8 JUDGE SCHEINER: All right. Yes. Go ahead. I was going to ask  
9 you to discuss the differences between this and the prior art.

10 MR. CARMAN: All right. Yeah, the prior art. Stephens is very  
11 different. Actually, lots of people have looked at the problem of how do you  
12 transfer this force to the forearm, and there are multiple inventions that we  
13 cited in our patent application to do that including some that have a circle  
14 around the forearm.

15 The problem is they don't allow one to pick this up as this does and  
16 put it on with one hand. They don't come off easily if you let go, so this is --  
17 which is a safety plus.

18 Stephens is very different because, well, it does two other  
19 requirements. It has the grip in the right position, and it does allow forces on  
20 all four sides of the forearm. It does that with two cuffs basically. A cuff  
21 here under the arm, and a cuff here over the arm that are connected. And the  
22 purpose of the -- the explicit purpose of the cuff is to restrain the forearm  
23 and to channel the forearm and to hold the forearm in the same alignment  
24 with the grip.

25 The grip also has a place for the thumb and the fingers.

1           Therefore, the problem with Stephens in terms of doing these various  
2 things is that, number one, you need a left-hand and a right-hand version,  
3 and number two, you basically need a small, medium and large in order to fit  
4 different-sized people, whereas this does all four at once.

5           And frankly, two cuffs like this are not the same as a helix, and a helix  
6 is much more elegant, uses much less material. It will be lighter. Anybody  
7 can pick it up and put it on.

8           And because of this flat seat, this flat seat in Stephens is a channel  
9 which puts your arms right into the channel like this, so you cannot by  
10 design move your wrist and, therefore, you cannot get the advantage of  
11 being able to tighten it up the way we can with this one.

12          JUDGE SCHEINER: All right.

13          MR. BOOKSTEIN: Thank you, Ed.

14          JUDGE SCHEINER: Thank you for that demonstration. It was very  
15 helpful.

16          MR. BOOKSTEIN: I'm not sure why I'm here after that  
17 demonstration. But perhaps we can talk a bit about the substance of the  
18 action.

19          There are several aspects to it. One is the section 112 issue. Now,  
20 there was a rejection, 112, paragraph 1, and I believe that has been  
21 withdrawn.

22          JUDGE SCHEINER: Withdrawn.

23          MR. BOOKSTEIN: The paragraph 2 rejection, I think that has been  
24 treated pretty thoroughly in the brief so unless any –

1 JUDGE ADAMS: Well, what is this phrase "and the like"? What  
2 does that mean to you?

3 MR. BOOKSTEIN: "And the like" doesn't really mean anything,  
4 which is why we wanted to take it out. I don't disagree with the Examiner  
5 on that.

6 JUDGE ADAMS: So it would read into your claim a crutch as the  
7 Examiner's reading the claim?

8 MR. BOOKSTEIN: Well, I don't -- I will talk to that about the crutch  
9 because Applicant's application even mentions the use of his invention as a  
10 crutch, but there is a great deal of difference, and I'll get to that if you can  
11 bear with me.

12 JUDGE ADAMS: Okay.

13 MR. BOOKSTEIN: But the phrase "or the like," I'm the first to  
14 acknowledge I don't think it really means much or it doesn't mean anything.  
15 It just -- I don't know what "or the like" is.

16 So as I say, unless there are any further questions, I don't have  
17 anything more to say about the 112 aspect of it.

18 Looking at Stephens and comparing Stephens under an anticipation  
19 standard with, for example, claim 1, Stephens is missing a number of the  
20 elements set forth in claim 1. One of the elements is that we have -- it calls  
21 for a handle, as Mr. Carman explained, and it also says that the handle is  
22 detachably connectable to the tool.

23 Now, what is the -- how do you interpret "tool" and how do you  
24 interpret "handle"? You interpret it according to the specification. The tool  
25 is the thing that attaches to the handle, and it has got to be separable.



1           One of the tools that is mentioned in the Application is a crutch, and  
2   that tool, that is the long length which forms the crutch, that is considered to  
3   be the tool. The Examiner is reading that as being the extension as part of  
4   the handle at the front end of the handle, and I don't think that is a  
5   reasonable interpretation of our -- of the term "tool" and term "handle".

6           Stephens makes it clear that his handle ends at the juncture of the top  
7   of the crutch shaft and the end of what he calls his handle.

8           JUDGE SCHEINER: Isn't the Examiner calling the little --

9           MR. BOOKSTEIN: The little foot?

10          JUDGE SCHEINER: -- foot pad the tool?

11          MR. BOOKSTEIN: He is calling that the tool.

12          JUDGE SCHEINER: Okay.

13          MR. BOOKSTEIN: But the tool as claimed has to be detachably  
14   connectable.

15          JUDGE SCHEINER: Well, it is apparently detachable once you have  
16   that epoxy knob. But why don't we focus on the last two limitations of the  
17   claim?

18          MR. BOOKSTEIN: Okay. The seat with the side-to-side restraint --

19          JUDGE SCHEINER: Yes. And the helix versus --

20          MR. BOOKSTEIN: -- and the band-like helical brace? Well, for the  
21   side-to-side aspect of it, I think as Mr. Carman explained, Stephens  
22   describes his invention as being a channel, and the purpose of the channel is  
23   to support the wrist, the hand and the forearm and to keep them in linear  
24   alignment.

1           To me that is the opposite. Where they've got the channel that fits  
2 above the wrist, that is not going to allow the wrist the freedom of motion  
3 that is called for by the claim and as Mr. Carman showed the Board.

4           Also, the business about the helical, the claim limitation about a band-  
5 like member that is configured in a helix, I don't see how you can reasonably  
6 read Stephens as disclosing a helix. The Examiner has sought to do that by  
7 drawing some additional features onto the drawings of Stephens, but those  
8 aren't part of the Stephens disclosure. That is part of the Examiner's  
9 additions to Stephens.

10          I think it is pretty clear that in a 102 rejection, you have to take the  
11 reference for what it discloses, and the Examiner hasn't talked about  
12 inherency, but I don't think that you can say that that is inherently a helix.  
13 Doesn't look like a helix, and just because you can draw a helix on the inner  
14 surface of the Stephens handle, doesn't make the handle a helix.

15          JUDGE WALSH: Could you take a look at the first page of the  
16 Stephens patent?

17          MR. BOOKSTEIN: The drawing?

18          JUDGE WALSH: That is correct. The drawing on the first page of  
19 the Stephens patent.

20          MR. BOOKSTEIN: That figure 1 or 1A.

21          JUDGE WALSH: It shows -- there is a sketch of a person holding the  
22 Stephens device and then there is a sketch of the device to the right. And the  
23 way the person is holding it and the way the brace in Stephens wraps around  
24 the forearm, in that drawing, it has the appearance of the helix, and maybe

1 that is because parts of the brace are hidden by the forearm. When you look  
2 at the actual device, perhaps it doesn't look like a helix anymore.

3 MR. BOOKSTEIN: I agree.

4 MR. CARMAN: Yes.

5 JUDGE WALSH: So is that what you're getting at is that while it  
6 might have the appearance in one drawing because part of the structure is  
7 hidden by the forearm –

8 MR. BOOKSTEIN: I think you have to look at the complete  
9 Stephens patent and what is written in the patent as well as what is shown in  
10 its entirety. I don't think that one should just confine the understanding of  
11 Stephens to what is shown in figure 1. So I would agree.

12 It is like, you know, like I could ask you if you see my hand, and of  
13 course you'd say yes, but I'd say, no, you don't really see my hand until  
14 you've seen the other side. So you really have to see the whole thing. And I  
15 hope that answers the question.

16 JUDGE ADAMS: I have no questions.

17 JUDGE SCHEINER: Anything further?

18 Well, I think the demonstration was very helpful, and I think we  
19 understand the issues.

20 MR. BOOKSTEIN: Okay.

21 JUDGE SCHEINER: And you'll have a decision soon.

22 MR. BOOKSTEIN: Thank you.

23 (Whereupon, the proceedings at 9:18 a.m. were concluded.)  
24  
25